ABSTRACT OF THE DISCLOSURE

The invention deploys a message-based data transport platform, in which a communication engine controls the delivery of server or other backup data or other large quantity data to a remote site based on message objects as fundamental units. Data sessions from one or more servers or other data sources may be buffered over established pipes for delivery to a remote data host which likewise contains messaging control. Relatively large message units may wait for communication over the channel in a queue, and be released when prior messaging is complete. Completion port or other polling or other mechanisms may indicate that connections have become open for use. In embodiments the message objects may be signed, or encrypted to safeguard against alteration or unauthorized viewing. The communication engine may rely upon TCP or other underlying transport mechanisms to effect lower level transmission.